

Amendment  
(Amendment based on PCT Article 34)

5. Contents of Amendment

(1) In the specification at page 1, lines 25 to 27 "A first aspect of the invention is a torque rod..... the rod portion has a hollow cross-sectional shape" has been modified as set out below. As a result, it has been replaced with the replacement page 1.

"A first aspect of the invention is a torque rod comprising a built-in pair of rubber bushes formed respectively around a pair of cylinders, and a rod portion, which links both rubber bushes, wherein the cross-sectional shape of the central portion of the rod portion forms a rectangular shape, and one pair of opposing edges of the rectangular shape form a shape which bulges outwards".

(2) The scope of the claims has been canceled in claims 2 to 4, 6, 10, 13, 16, and 19, and modified in claims 1, 5, 7 to 9, 14, 17, 18, and 20. Claim 1 has been limited by the characteristic of claim 4. Claims 5, 8 and 9 have been made depending from claim 1. Claims 21 and 22 have been added.

6. List of documents attached

- (1) 1 and 1/2 pages (corresponding to page 1 in the Japanese Specification)
- (2) 7 to 9 pages (corresponding to pages 7 and 8 in the Japanese claims)

## SPECIFICATION

### TORQUE ROD STRUCTURE

#### TECHNICAL FIELD

[0001] The present invention relates to a torque rod for arresting the movement of an engine of a motor vehicle, and related to improving torque rods made of resin or metal that connect a pair of rubber bushes or cylinders.

#### BACKGROUND ART

[0002] Conventionally with torque rods, there is, as shown in Figure 1A, a torque rod 10, connecting a pair of rubber bushes 3,4 and cylinders 1,2, is usually made of resin, iron or aluminum. The core of the rod portion is either a rectangular cross-sectional shape or H section cross section ribbed structure (see Figure 1B and the patent publication reference 1). 6 are hollow portions, 5,8 are rubber stoppers, 9 is a rib formed on the surface. Figure 1B is the cross section of Figure 1A at the line "a-a".

[0003] However, for such a torque rod 10, whilst this can satisfy the requirements in terms of raising the compression strength and tensile strength, it is not a shape which takes into account other requirements. For example, the current situation is that the demands in recent years for bending stiffness and twisting stiffness are not adequately provided for. That is, conventionally in the shape of torque rods connecting cylindrical rubber bushes, a rib is put on the surface, and by doing so the aimed for compression and tensional strength can be achieved. However, against bending and twisting, the secondary moment and section modulus is lowered, and, for example, it is pointed out that the twisting stiffness cannot be increased.

Patent Publication Reference 1: Japanese Patent Application Laid-Open Heisei 10-299805.

#### DISCLOSURE OF THE INVENTION

##### PROBLEMS ADDRESSED BY THE INVENTION

[0004] The invention is made to solve the above problems, and addresses the requirements by providing an improved shape of the rod portion with increased stiffness to bending and twisting.

##### MEANS OF SOLVING THE PROBLEMS

[0005] A first aspect of the invention is a torque rod comprising a built-in pair of rubber bushes formed respectively around a pair of cylinders, and a rod portion, which links both rubber bushes, wherein the cross-sectional shape of the central portion of the rod portion forms a rectangular shape, and one pair of opposing edges of the rectangular shape form a shape which bulges outwards.

## CLAIMS

- 1 (amended) A torque rod, the torque rod structure comprising a rod portion with a built-in pair of rubber bushes, which are formed respectively around a pair of cylinders, the rod portion linking both the rubber bushes, wherein  
the cross-sectional shape of the central portion of the rod portion forms a rectangular shape, and one pair of opposing edges of the rectangular shape form a shape which bulges outwards.
- 2 (cancelled)
- 3 (cancelled)
- 4 (cancelled)
- 5 (amended) The torque rod structure of claim 1, wherein the rod portion is shaped with a plurality of void portions.
- 6 (cancelled)
- 7 (amended) The torque rod structure according to claim 5, wherein the void portions are formed on the bulging edges.
- 8 (amended) The torque rod structure according to claim 1, wherein cross-shaped ribs are formed on the rod portion.
- 9 (amended) The torque rod structure according to claim 1, wherein the shape of the cross-section in the vicinity of the central portion has along the longitudinal direction of the rod portion either a continuous hollow, or a series of alternate cross-sections which have a notched portion and cross-sections which do not have a missing portion.
- 10 (cancelled).
- 11 The torque rod structure according to claim 9, wherein the cross-section shape of the rod portion has along the longitudinal direction of the rod portion a continuous hollow.

12 The torque rod structure according to claim 11, wherein the rod portion is formed from three faces which are integrally formed as a U-section and a side face which connects thereto as a cap.

13 (cancelled)

14 (amended) The torque rod structure according to claim 9, wherein the rod portion is shaped with a plurality of void portions.

15 The torque rod structure according to claim 14, wherein the void portions correspond to the notched portions.

16 (cancelled)

17 (amended) The torque rod structure according to claim 14, wherein the notched portions are formed on the bulging edges.

18 (amended) The torque rod structure according to claim 9, wherein cross-shaped ribs are formed on the rod portion.

19 (cancelled)

20 (amended) The torque rod structure according to claim 18, wherein the rod has a honey comb shape.

21 (added) The torque rod structure according to claim 1, wherein the cross-section shape of the rod portion has a hollow.

22 (added) The torque rod structure according to claim 21, wherein the rod portion is formed from three faces which are integrally formed as a U-section and a side face which connects thereto as a cap.